

IN THE CLAIMS:

Please replace the claims with the following set of claims:

Claims 1-16. (previously cancelled)

17. (cancelled)

18. (currently amended) The organic based device of claim [[17]] 36 being an OFET, and wherein the first active material is 1,4-bis(vinylene-(N-methyl-7-hexyl-2-carbazole))phenylene (RCPCR).

19. (currently amended) The organic based device of claim [[17]] 36 being an OFET, and wherein the first active material is 1,4-bis(vinylene-(N-hexyl-2-carbazole))phenylene (CPC).

20. (currently amended) The organic based device of claim [[17]] 36 being an OPC and further comprising a second active material, wherein said first active material is mixed with the second active material.

21. (previously added) The organic based device of claim 20, wherein said second active material is [N,N'-Bis(2,6-dimethylphenyl)-3,4,9,10-perylenetetracarboxylic diimide] (PTD).

22. (previously added) The organic based device of claim 20, wherein said second active material is [6,6-phenyl-C61 butyric acid methyl ester] (PCBM).

23. (currently amended) The organic based device of claim ~~[[17]]~~ 36 being an OPC comprising a hole transport layer and an electron transport layer, and wherein at least one of said hole transport layer and said electron transport layer comprises either alone or in combination as active material the compound of Formula I.

24. (currently amended) The organic based device of claim ~~[[17]]~~ 36 being an OFET.

25. (currently amended) The organic based device of claim ~~[[17]]~~ 36 being an OPC.

26. (cancelled)

27. (currently amended) The organic based device of claim ~~[[26]]~~ 35 being an OPC, and wherein the first active material is [Poly (N-(2-ethylhexyl-2,7-carbazolenevinylene-co-2,5-bis(diphenylamine)-1,4-phenylenevinylene-co-((4-(2-ethylhexyloxy)-phenyl)-bis-(4'-phenylene)amine))] (PCVDPATA).

28. (currently amended) The organic based device of claim ~~[[26]]~~ 35 being an OPC, and wherein the first active material is [Poly (N-(4-hexyloxyphenyl)-2,7-carbazolenevinylene-alt-(3-hexyl-2,5-thiophenevinylene))] (PPCVT).

29. (currently amended) The organic based device of claim ~~[[26]]~~ 35 being an OPC and further comprising a second active material, wherein said first active material is mixed with the second active material.

30. (previously added) The organic based device of claim 29, wherein said second active material is [N,N'-Bis(2,6-dimethylphenyl)-3,4,9,10-perylenetetracarboxylic diimide] (PTD).

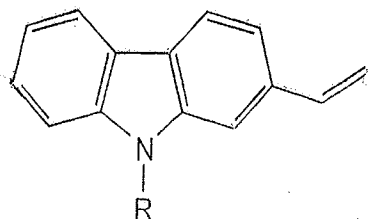
31. (previously added) The organic based device of claim 29, wherein said second active material is [6,6-phenyl-C61 butyric acid methyl ester] (PCBM).

32. (currently amended) The organic based device of claim ~~[[26]]~~ 35 being an OPC comprising a hole transport layer and an electron transport layer, and wherein at least one of said hole transport layer and said electron transport layer comprises either alone or in combination as active material the compound of Formula II.

33. (currently amended) The organic based device of claim ~~[[26]]~~ 35 being an OFET and there being no second comonomer.

34. (currently amended) The organic based device of claim ~~[[26]]~~ 35 being an OPC and there being no second comonomer.

35. (new) An organic based device which is an organic Field Effect Transistor (OFET) or an Organic Photovoltaic Cell (OPC), the device comprising as a first active material a polymer of monomers defined by Formula II:



(II)

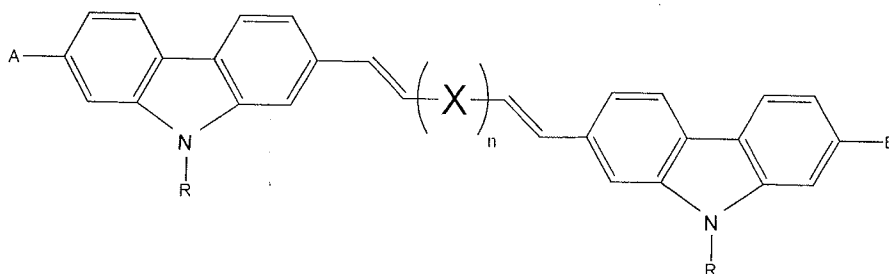
and optionally of a second comonomer which is one of ethylene, acetylene, a C₆-C₂₂ mononuclear/polynuclear aromatic group, a C₂-C₁₀ mononuclear/polynuclear heterocyclic group, and a tertiary arylamine,

wherein R is selected from hydrogen, a linear or branched alkyl group containing 1 to 20 carbon atoms, a linear or branched alkoxy group containing 1 to 20 carbon atoms, a poly (ethyleneoxy) group, a cyano group, an aryl group, an amide group, and a benzoyl group,

the polymer having a first end-cap group selected from hydrogen, a linear or branched alkyl group containing 1 to 20 carbon atoms, a linear or branched alkoxy group containing 1 to 20 carbon atoms, a cyano group, a halogen group, a monovalent aromatic group, and a monovalent aromatic complex ring group having one nitrogen atom as a hetero-atom,

and the polymer having a second end-cap group selected from hydrogen, a linear or branched alkyl group containing 1 to 20 carbon atoms, a linear or branched alkoxy group containing 1 to 20 carbon atoms, a cyano group, a halogen group, a monovalent aromatic group, and a monovalent aromatic complex ring group having one nitrogen atom as a hetero-atom.

36. (new) An organic based device which is an organic Field Effect Transistor (OFET) or an Organic Photovoltaic Cell (OPC), the device comprising as a first active material a conjugated oligomeric 2,7-carbazolenevinylene derivative described by the formula I:



(I)

wherein X is a comonomer selected from the group consisting of ethylene, acetylene, a C₆-C₂₂ mononuclear/polynuclear aromatic group, a C₂-C₁₀ mononuclear/polynuclear heterocyclic group, and a tertiary arylamine, wherein A is selected from hydrogen, a linear or branched alkyl group containing 1 to 20 carbon atoms, a linear or branched alkoxy group containing 1 to 20 carbon atoms, a cyano group, a halogen group, a monovalent aromatic group, and a monovalent aromatic complex ring group having one nitrogen atom as a hetero-atom, wherein B is selected from hydrogen, a linear or branched alkyl group

containing 1 to 20 carbon atoms, a linear or branched alkoxy group containing 1 to 20 carbon atoms, a cyano group, a halogen group, a monovalent aromatic group, and a monovalent aromatic complex ring group having one nitrogen atom as a hetero-atom, wherein R is selected from hydrogen, a linear or branched alkyl group containing 1 to 20 carbon atoms, a linear or branched alkoxy group containing 1 to 20 carbon atoms, a poly (ethyleneoxy) group, a cyano group, an aryl group, an amide group, and a benzoyl group, and where n is an integer equal to 1 or 2.